

CLAIMS

1. An orthotic toe spacer comprising:
an inter-digital column for extending generally vertically between adjacent toes of
a user,
5 the column being width-adjustable to form an orthotic spacer for urging laterally
apart the adjacent toes that the column extends between to a defined inter-digital spacing.
2. The spacer of claim 1, wherein the column includes a width-adjustable
recess therein for receiving an insert of defined width to fix the inter-digital spacing.
- 10 3. The spacer of claim 1, wherein the column includes a width-adjustable,
pressurizable bladder for receiving a fluid under pressure to fix the inter-digital spacing.
4. An orthotic toe spacer comprising:
15 an inter-digital column for extending generally vertically between adjacent toes of
a user, the column having a generally cylindrical hour-glass shape including cross-
sectionally concave sidewalls;
a hollow elongate generally planar recess formed in a generally central region of
the column; and
20 an insert fitted into the recess and fixedly gripped thereby, the insert rigidizing the
column and laterally widening the recess and the column into which the insert is fitted;
the column having the insert within the recess forming an orthotic spacer for
urging laterally apart the adjacent toes that the spacer extends between to a predetermined
inter-digital spacing.
- 25 5. The spacer of claim 4, wherein the recess is dimensioned to accommodate
therein an insert in the form of a shim selected from a group of shims of various widths.
6. The spacer of claim 4, wherein the insert is a pressure-adjustable
30 pneumatic bladder.
7. The spacer of claim 4, wherein the insert is a pressure-adjustable hydraulic
bladder.

8. The spacer of claim 4, wherein the column is formed of an elastomer.
9. The spacer of claim 8, wherein the insert is formed of a polymer.
- 5 10. The spacer of claim 4, wherein the column is elongated for extending along an axis between the adjacent toes and wherein the column is dimensioned in length approximately equal to the average length of the adjacent toes.
- 10 11. The spacer of claim 4, wherein the insert is of a generally circular disk shape having opposing tabs extending radially from a center.
12. The spacer of claim 4, wherein the recess extends through the column from a top region to a bottom region of the column.
- 15 13. The spacer of claim 4, wherein the recess is of a generally circular disk shape and wherein the insert is of a generally circular disk shape, wherein the recess and the insert are generally isometric and isomorphic to one another.
- 20 14. The spacer of claim 4 which further comprises:
a fastener for attaching to the foot of the user the column with the insert therein.

15. Orthotic foot platform apparatus comprising: ✓

two or more inter-digital spacers for extending between one or more pairs of adjacent toes, each of the two or more spacers being made of a material that is shape-retentive and sufficiently durable to urge apart and maintain a predetermined separation
5 between adjacent toes of the one or more pairs, each of the spacers having upper and lower generally parallel planar regions, and

one or more interconnecting web structures fixedly attached to and extending across the upper and lower regions of the two or more spacers to fix the spacers relative to one another in a generally parallel configuration to produce a toe channel between the two
10 or more spacers for receiving one of the two or more adjacent toes and for spacing apart at least one other of the one or more pairs of adjacent toes.

16. The apparatus of claim 15, wherein each of the two or more spacers is width-adjustable to fix inter-digital spacing.

15

17. The apparatus of claim 15, wherein each of the spacers includes a recess therein extending inwardly from at least one of the upper and lower regions, which apparatus further comprises:

one or more inserts within the one or more recesses, the inserts configured to
20 rigidize the spacers and the inserts dimensioned to widen the recess and the column thereby to fix inter-digital spacing between the adjacent toes of the one or more pairs.

18. The apparatus of claim 17, wherein the apparatus comprises four of the spacers having four recesses therein and four of the inserts within the four recesses.

25

19. The apparatus of claim 18, wherein the four spacers and the one or more web structures are formed together by integrally molding the same.

20. The apparatus of claim 18, wherein the four spacers and the one or more
30 web structures are formed of an elastomeric material.

21. The apparatus of claim 20, wherein the inserts are formed of an elastomeric material having a defined width that fixes a desired inter-digital spacing.


22. The apparatus of claim 20, wherein the inserts include an adjustably pressurizable bladder having a defined width that fixes a desired inter-digital spacing.

23. The apparatus of claim 20, wherein the four spacers are adhered at the
5 respective upper and lower regions thereof to the one or more web structures.

24. The apparatus of claim 23, wherein the one or more web structures are curved in an arc conforming to an arc of the toes and fix the four spacers in an arc corresponding thereto.
10

25. The apparatus of claim 24, wherein the four recesses extend through the four columns from the top region toward the bottom region thereof, and wherein the four recesses are dimensioned to accommodate therein shims selected from a group of shims of various widths.
15

26. The apparatus of claim 23 which further comprises:
a fastener for attaching to the foot of the user the integrally molded web structures and spacers having the four inserts therein.

27. An orthotic foot care method of, the method comprising: 
fitting a foot of a user with an appliance having spacers for extending between pairs of adjacent toes and for spreading the same relative to one another, and
adjusting the width of individual ones of such spacers to a desired spacing for each pair of adjacent toes on the foot of the user.
20

28. The method of claim 27, wherein the adjusting includes selecting and inserting shims of predetermined width into corresponding recesses formed within the bodies of the spacers.
25

29. The method of claim 27, wherein the adjusting includes selecting and inserting pressurizable bladders of adjustable width into corresponding recesses formed within the bodies of the spacers.
30

30. The method of claim 27 which further comprises:
fastening the appliance to the foot of the user to secure it.